Features
- Wirewound
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low profile
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRP2510A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 1 MHz / 1 V</th>
<th>Q (Typ.) @ 1 MHz</th>
<th>SRF (MHz)</th>
<th>DCR (mΩ)</th>
<th>DCR (mΩ) Max.</th>
<th>Irms (A)</th>
<th>Isat (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L (μH)</td>
<td>Tol. (%)</td>
<td></td>
<td>Typ.</td>
<td></td>
<td></td>
<td>Typ.</td>
</tr>
<tr>
<td>SRP2510A-R22M</td>
<td>0.22</td>
<td>±20</td>
<td>35</td>
<td>170</td>
<td>9</td>
<td>12.5</td>
<td>5.9</td>
</tr>
<tr>
<td>SRP2510A-R33M</td>
<td>0.33</td>
<td>±20</td>
<td>35</td>
<td>170</td>
<td>21</td>
<td>26</td>
<td>4.4</td>
</tr>
<tr>
<td>SRP2510A-R47M</td>
<td>0.47</td>
<td>±20</td>
<td>35</td>
<td>138</td>
<td>27</td>
<td>32</td>
<td>3.9</td>
</tr>
<tr>
<td>SRP2510A-R68M</td>
<td>0.68</td>
<td>±20</td>
<td>35</td>
<td>120</td>
<td>37</td>
<td>44</td>
<td>3.4</td>
</tr>
<tr>
<td>SRP2510A-1R0M</td>
<td>1.0</td>
<td>±20</td>
<td>35</td>
<td>94</td>
<td>45</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>SRP2510A-1R5M</td>
<td>1.5</td>
<td>±20</td>
<td>35</td>
<td>68</td>
<td>76</td>
<td>91</td>
<td>2.5</td>
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<tr>
<td>SRP2510A-2R2M</td>
<td>2.2</td>
<td>±20</td>
<td>35</td>
<td>57</td>
<td>99</td>
<td>119</td>
<td>2.3</td>
</tr>
<tr>
<td>SRP2510A-4R7M</td>
<td>4.7</td>
<td>±20</td>
<td>35</td>
<td>40</td>
<td>220</td>
<td>262</td>
<td>1.36</td>
</tr>
</tbody>
</table>

General Specifications
- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature (Component): -50 °C to +125 °C
- Rated Current: Inductance drops 30% at Isat
- Temperature Rise: 40 °C at rated Irms
- Moisture Sensitivity Level (MSL): 1
- ESD Classification (HBM): N/A

Materials
- Core: Metal alloy powder
- Wire: Enamelled copper
- Terminal Finish: Sn
- Packaging: 3000 pcs. per 7-inch reel

Soldering Profile

<table>
<thead>
<tr>
<th>Profile Feature</th>
<th>Pb Free Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Ramp Rate (TSmax to TP)</td>
<td>3 °C/second max.</td>
</tr>
<tr>
<td>Preheat</td>
<td></td>
</tr>
<tr>
<td>- Temperature Min. (TSmin)</td>
<td></td>
</tr>
<tr>
<td>- Temperature Max. (TSmax)</td>
<td></td>
</tr>
<tr>
<td>- Time (tsmin to tsmax)</td>
<td></td>
</tr>
<tr>
<td>Time Maintained Above</td>
<td></td>
</tr>
<tr>
<td>- Temperature (TL)</td>
<td></td>
</tr>
<tr>
<td>- Time (tL)</td>
<td></td>
</tr>
<tr>
<td>Peak Temperature (TP)</td>
<td></td>
</tr>
<tr>
<td>Time within 5 °C of Actual Peak Temperature (TP)</td>
<td></td>
</tr>
<tr>
<td>Ramp-Down Rate</td>
<td></td>
</tr>
<tr>
<td>Time 25 °C to Peak Temperature</td>
<td></td>
</tr>
</tbody>
</table>

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

** Bourns considers a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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Recommended Layout

How to Order

SRP2510A - R22M

Model

Value Code (see table)
SRP2510A Series - Shielded Power Inductors

L vs. I Charts

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SRP2510A Series - Shielded Power Inductors

Packaging Specifications

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REV. 08/17
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